

Attorney's Docket No.: 06618-424002

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method ~~of forming an electrically active material, comprising:~~
  - obtaining a silicon substrate;
  - forming a first material on said silicon substrate;
  - forming a conductive layer on said first material, said  
~~conductive layer formed of a electrically conductive, fully~~  
~~oxidized, transition metal material combined with a SiO<sub>2</sub> which~~  
~~is immiscible with said electrically conductive material, and a~~  
~~ferroelectric layer, over said conducting layer~~ said conductive  
layer consisting essentially of three materials forming a  
ternary oxide material having first and second immiscible  
compounds, said first and second immiscible compounds having one  
common element, wherein said first compound is of the form TMO<sub>x</sub>  
where Tm is a transition metal that is one of Ru, Mo, Rh, Os, Re,  
W, Cr, Ti, In or Ir, and said second compound is of the form JO<sub>y</sub>  
where J is a different material than Tm and said first and  
second compounds being formed in an amorphous state, and being  
meta-stable relative to one another over a temperature range,  
and wherein said common element is oxygen;
  - directly connecting said ferroelectric layer to said other  
material without a barrier layer therebetween; and

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heating said device in a high temperature environment between 300 and 700 °C and oxidizing environment without forming substantial oxidization in said first material.

2. (Currently Amended) A method as in claim 1, wherein said first material is a dielectric material.

3. (Original) A device as in claim 1, wherein said electrical material is formed by sputtering an oxygen containing gas at least one target containing distinct sites of Ruthenium and silicon.

Kindly add the following new claim:

4. (New) A method as in claim 1, wherein the transition metal is an amorphous combination of ruthenium dioxide and silicon dioxide